



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,917	12/13/2000	Brian Gerard Goodman	TUC920000080US1	5184

7590 09/22/2004

JOHN H. HOLCOMBE  
IBM CORPORATION  
INTELLECTUAL PROPERT LAW  
8987 E. TANQUE VERDE ROAD #309-374  
TUCSON, AZ 85749-9610

EXAMINER

RAMPURIA, SATISH

ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/734,917

Applicant(s)

GOODMAN, BRIAN GERARD

Examiner

Satish S. Rampuria

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
~~Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).~~
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) *  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. This action is in response to the amendment received on 06/07/2004.
2. The objection to the specification is withdrawn in view of applicant's amendment.
3. Claims 1-35 are pending.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6, 9-20, 22-29, 30, and 32-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Barrett et al., hereinafter called Barrett, US Patent No. 6,023,727.

---

**As per claims 1, 19, and 35 Barrett discloses:**

---

- ***A multi-node network of processors*** (col. 1, lines 32-33 “connected to more than one network-LAN” and 23-24 “col. 1, lines 23-24 “network communication devices” see Fig. 1)
- ***a network*** (col. 1, lines 23-24 “network communication” see Fig. 1)
- ***a plurality of processors coupled in said network*** (col. 1, lines 35-36 “LAN... connected ... several reprogrammable network communication devices” see Fig. 1)
- ***processors having a minimally operational state*** (col. 16, lines 4-5 “NEB... shipped with operational software”). It is inherent for processor to be in minimally operational state in order to update or upgrade or download program or code image.

Art Unit: 2124

- *a fully operational state employing a code image, said processors* (col. 17, lines 2-5 "new program image is received over the network, microprocessor... downloads... new image"). It is inherent that device is in the mode for download image.

- *when in said minimally operational state, requesting said code image from said network* (col. 16, lines 8-9 "network administrator's PC 103, the network administrator can remotely alter the ROM firmware image in flash EPROM 174 by downloading new data" and col. 8, lines 45-46 "The program respond to requests... for data download");

- *and a master source coupled in said network* (col. 16, line 13 "A... PC... connected to more than one LAN"), said master source having at least said *code image for broadcasting said code image on said network* (col. 16, lines 7-9 "network administrator's PC (master source code)... remotely alter the ROM firmware image in flash EPROM"),

- *upon receiving said code image request waiting a predetermined time period, said predetermined time period allowing any additional said processor to reach said minimally operational state* (col. 10, lines 57-60 "NEB microprocessor 173 stops writing to memory (and accordingly stops reading and updating the pointers) at predetermined intervals, allowing printer interface microprocessor 151 sole access to the memory until it catches up"),

- *broadcasting said code image on said network* (col. 16, line 36 "proper image is sent to the targeted NEB").

As per claims 2 and 20, the rejection of claims 1 and 19 is incorporated respectively, and further Barrett discloses:

Art Unit: 2124

- *receive and implement said code image* (col. 16, lines 31-32 “The flash EPROM on board then reprograms itself with the new image”)

As per claims 3, 4, the rejection of claim 1 is incorporated and further Barrett discloses:

- *a non-volatile memory for storing said minimally operational state code* (col. 7, line 24-27 “non-volatile random access memory (NVRAM)... used for initialization data storage during power cycling of printer 102 which houses NEB 101”)

As per claim 5, the rejection of claim 3 is incorporated and further Barrett discloses:

- *minimally operational state is additionally sufficient to conduct at least a basic system test and provide said code image request* (col. 8, lines 61-64 “POST is a power-on self-test module that checks the integrity of NEB hardware and software at power-up”)

As per claim 6, the rejection of claim 1 is incorporated and further Barrett discloses:

- *a RAM for, upon receiving said code image, storing said code image* (col. 2, lines 2-3 “A random access memory stores a new program image for the reprogrammable read only memory”)

As per claims 9 and 22, the rejection of claims 1 and 19 is incorporated respectively, and further Barrett discloses:

- *image is correct for said processor and select said broadcast code image for implementation if said determination determines that said code image is correct for said processor* (col. 17,

Art Unit: 2124

lines 3-4 “microprocessor... downloads the new image into DRAM... confirms that the new program image is compatible ... configuration information... reprogram... ERPOM... only... compatibility is confirmed”)

**Claim 10** is the method claim corresponding to system claim 1 and rejected under the same reason set forth in the connection of the rejection of claim 1 above.

**Claim 11** is the method claim corresponding to system claim 2 and rejected under the same reason set forth in the connection of the rejection of claim 2 above.

**Claim 12** is the method claim corresponding to system claim 3 and rejected under the same reason set forth in the connection of the rejection of claim 3 above.

**Claim 13** is the method claim corresponding to system claim 4 and rejected under the same reason set forth in the connection of the rejection of claim 4 above.

**Claim 14** is the method claim corresponding to system claim 5 and rejected under the same reason set forth in the connection of the rejection of claim 5 above.

---

**Claim 15** is the method claim corresponding to system claim 6 and rejected under the same reason set forth in the connection of the rejection of claim 6 above.

**Claim 16** is the method claim corresponding to system claim 7 and rejected under the same reason set forth in the connection of the rejection of claim 7 above.

**Claim 17** is the method claim corresponding to system claim 8 and rejected under the same reason set forth in the connection of the rejection of claim 8 above.

**Claim 18** is the method claim corresponding to system claim 9 and rejected under the same reason set forth in the connection of the rejection of claim 9 above.

As per claim 23, Barrett discloses:

- ***For a multi-node network of processors*** (col. 1, lines 32-33 “connected to more than one network-LAN” and 23-24 “col. 1, lines 23-24 “network communication devices” see Fig. 1)
- ***said network having a master source coupled in said network*** (col. 16, line 13 “A... PC... connected to more than one LAN”),
- ***said master source having a code image for broadcasting on said network*** (col. 16, lines 7-9 “network administrator's PC (master source code... remotely alter the ROM firmware image in flash EPROM”),
- ***said master source, upon receiving said code image request, waiting a predetermined time period, said predetermined time period allowing any additional processor to reach said minimally operational state*** (col. 10, lines 57-60 “NEB microprocessor 173 stops writing to memory (and accordingly stops reading and updating the pointers) at predetermined intervals, allowing printer interface microprocessor 151 sole access to the memory until it catches up”),
- ***and, upon completion of said predetermined time period, broadcasting said requested code image on said network*** (col. 16, line 36 “proper image is sent to the targeted NEB”).
- ***a non-volatile memory for Storing code providing a minimally operational state of said processor*** (col. 7, line 24-27 “non-volatile random access memory (NVRAM)... used for initialization data storage during power cycling of printer 102 which houses NEB 101”)
- ***a processor memory storing a code image providing a fully operational state of said processor*** (col. 2, lines 2-3 “A random access memory stores a new program image for the reprogrammable read only memory”)

- *and a processing unit coupled to said non-volatile memory* (col.7, line 24, “NEB control logic... interfaces with non-volatile random access memory”)
- *said processor memory and said processor interface, when in said minimally operational state provided by said non-volatile memory, requesting said code image from said network* (col. 16, lines 8-9 “network administrator's PC 103, the network administrator can remotely alter the ROM firmware image in flash EPROM 174 by downloading new data” and col. 8, lines 45-46 “The program respond to requests... for data download”), via said processor interface(col. 3, lines 40-42 “NEB 101 is coupled to local area network (LAN) 100 through a LAN interface”)

As per claim 24, the rejection of claim 23 is incorporated and further Barrett discloses:

- *receive and implement said code image* (col. 16, lines 31-32 “The flash EPROM on board then reprograms itself with the new image”)

---

As per claim 25, the rejection of claim 23 is incorporated and further Barrett discloses:

- *a non-volatile memory for storing said minimally operational state code* (col. 7, line 24-27 “non-volatile random access memory (NVRAM)... used for initialization data storage during power cycling of printer 102 which houses NEB 101”)

As per claim 26, the rejection of claim 25 is incorporated and further Barrett discloses:



*- minimally operational state is additionally sufficient to conduct at least a basic system test and provide said code image request* (col. 8, lines 61-64 “POST is a power-on self-test module that checks the integrity of NEB hardware and software at power-up”)

As per claim 27, the rejection of claim 23 is incorporated and further Barrett discloses:

*- a RAM for, upon receiving said code image, storing said code image* (col. 2, lines 2-3 “A random access memory stores a new program image for the reprogrammable read only memory”)

**Claim 30** is the product claim corresponding to system claim 1 and rejected under the same reason set forth in the connection of the rejection of claim 1 above.

**Claim 32** is the product claim corresponding to system claim 9 and rejected under the same reason set forth in the connection of the rejection of claim 9 above.

**Claim 33** is the method claim corresponding to system claim 1 and rejected under the same reason set forth in the connection of the rejection of claim 1 above.

**Claim 34** is the product claim corresponding to system claim 33 and rejected under the same reason set forth in the connection of the rejection of claim 33 above.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2124

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 8, 21, 28, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett, in view of Harmer et al., hereinafter called Harmer, US Patent No. 6,401,198.

**As per claims 7, 8, 21, 28, and 29**, the rejection of claims 1, 19, and 23 is incorporated respectively, and further Barrett did not explicitly disclose code image is a combination of different images.

However, Harmer discloses one code image contains multiple code images (col. 10, lines 11-12 "one code image making up the first portion... and second portion... of .... BIOS" and col. 10, lines 14-17 "BIOS... include multiple images... each... images corresponding to a different... computer architecture... device... attached").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of having one code image with different images included as taught by Harmer into the method of distributing the code image as taught by Barrett. The modification would be obvious because of one of ordinary skill in the art would be motivated to include several code images into one code image to update or upgrade or download code for the devices connected on the network.

**Claim 31** is the product claim corresponding to system claim 8 and rejected under the same reason set forth in the connection of the rejection of claim 8 above.

***Response to Arguments***

8. The affidavit under 37 CFR 1.132 filed 06/07/2004 is insufficient to overcome the rejection of claim 1-35 based upon fails to set forth facts showing is not commensurate in scope with the claims as set forth in the last Office action because: Expert's declarant's opinion on the ultimate legal issues is not evidence in the case. It is merely an opinion that Barrett's reprogrammable network communication device does not have a minimally operational state, the reprogrammable network communication device does not request the code image from the network, and code image supplied by Barrett is conducted by the network administrator own initiative, and not at the request of a processor in the network.

However, Barrett's does disclose reprogrammable network communication device have a minimally operational state (col. 16, lines 4-5 "NEB... shipped with operational software" and (col. 7, lines 29-32 "when the printer is first installed onto the network to allow NEB software to recover the installation parameters after printer power has been cycled off and on"), the reprogrammable network communication device request the code image from the network (col. 4, lines 7-9 "transfers the ordered data files to printer... upon command from print server" and col. 8, lines 45-47 "requests for data download, or requests for services form remote utilities").

Therefore, claims 1-35 are still stand rejected.

1. Applicant's arguments with respect to claims 1-35 have been considered but they are not persuasive.

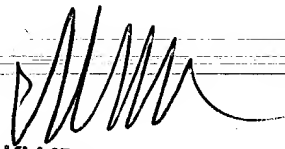
For claims 1-35 applicant's arguments are the same as stated in the affidavit, see the response to the affidavit.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Satish S. Rampuria  
Patent Examiner  
Art Unit 2124  
09/20/2004



**ANIL KHATRI**  
**PRIMARY EXAMINER**